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18N1

EXAMINER	
ULM, J	
37 UNIT	PAPER NUMBER
1812	23

03/09/93

Below is a communication from the EXAMINER in charge of this application

COMMISSIONER OF PATENTS AND TRADEMARKS

ADVISORY ACTION

☐ THE PERIOD FOR RESPONSE:

- a) ☐ is extended to run \_\_\_\_\_ or continues to run \_\_\_\_\_ from the date of the final rejection
- b) ☐ expires three months from the date of the final rejection or as of the mailing date of this Advisory Action, whichever is later. In no event however, will the statutory period for the response expire later than six months from the date of the final rejection.

Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a), the proposed response and the appropriate fee. The date on which the response, the petition, and the fee have been filed is the date of the response and also the date for the purposes of determining the period of extension and the corresponding amount of the fee. Any extension fee pursuant to 37 CFR 1.17 will be calculated from the date of the originally set shortened statutory period for response or as set forth in b) above.

☒ Appellant's Brief is due in accordance with 37 CFR 1.192(a).

☒ Applicant's response to the final rejection, filed 1/7/93 has been considered with the following effect, but it is not deemed to place the application in condition for allowance:

1. ☐ The proposed amendments to the claim and/or specification will not be entered and the final rejection stands because:
- a. ☐ There is no convincing showing under 37 CFR 1.116(b) why the proposed amendment is necessary and was not earlier presented.
  - b. ☐ They raise new issues that would require further consideration and/or search. (See Note).
  - c. ☐ They raise the issue of new matter. (See Note).
  - d. ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.
  - e. ☐ They present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. ☐ Newly proposed or amended claims \_\_\_\_\_ would be allowed if submitted in a separately filed amendment cancelling the non-allowable claims.
3. ☐ Upon the filing an appeal, the proposed amendment ☐ will be entered ☐ will not be entered and the status of the claims will be as follows:

Claims allowed: \_\_\_\_\_

Claims objected to: \_\_\_\_\_

Claims rejected: \_\_\_\_\_

However;

☐ Applicant's response has overcome the following rejection(s): \_\_\_\_\_

4. ☒ The affidavit, exhibit or request for reconsideration has been considered but does not overcome the rejection because of the reasons set forth in the attached sheets.

5. ☐ The affidavit or exhibit will not be considered because applicant has not shown good and sufficient reasons why it was not earlier presented.

☐ The proposed drawing correction ☐ has ☐ has not been approved by the examiner.

☐ Other

Claims 1 to 14, 24 to 34 and 39 to 59 are pending in the instant application. Claim 58 stands withdrawn as being drawn to a nonelected invention.

5 Claims 1 to 14, 24 to 34, 39 to 57 and 59 stand rejected under 35 U.S.C. § 103 as being unpatentable over the Petrovich et.al. publication in view of the Hauptmann et.al. and Krust et.al. publications for reasons of record.

10 The position that the claimed DNA is patentable because it differs in structure, sequence and biological activity from the DNA disclosed in the Petrovich et.al. reference has been considered but not found persuasive. Applicants' did not convey upon the claimed DNA those characteristics that distinguish it from a DNA encoding RAR- $\alpha$ . Applicants' contribution consists of isolating a DNA corresponding to a gene whose existence was  
15 disclosed prior to the instant invention by the Petrovich et.al. reference and whose method of isolation was taught in the prior art by the Hauptmann et.al. and Krust et.al. references. Those characteristics of this DNA that distinguish it from the DNA described in the Petrovich et.al. reference are inherent  
20 characteristics of that DNA that were neither unexpected nor the invention of Applicants. The argument regarding differences in sequence, location and expression of the RAR- $\alpha$  and RAR- $\beta$  genes are not persuasive because an artisan would have clearly expected such differences between to different but functionally related  
25 genes, as was shown in the prior art for type I interferon genes

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in the Hauptmann et.al. reference and for steroid receptor genes in the Krust et.al. reference.

Applicants' argument that the Petrovich et. al. reference does not provide an artisan with a reasonable expectation of successfully isolating a DNA encoding hORF ( a.k.a. RAR- $\beta$ ) ignores both the state of the art at the time of the instant invention and the scope of the disclosure of information about hORF provided by this reference. Figure 3C of this reference provided more than enough amino acid sequence information about the protein product encoded by the RAR- $\beta$  gene to make the isolation of its corresponding DNA a certainty. This reference even disclosed the chromosomal location of this gene as "immediately downstream from the insertion site of the hepatitis B virus (HBV) genome in a human hepatoma". The Petrovich et.al. reference, taken alone, provided both the suggestion to isolate the DNA of the instant invention and sufficient information about this gene to guarantee its isolation by an artisan of ordinary skill using those methods that were in routine use at that time.

Applicant's arguments filed 7 January of 1993 have been fully considered but they are not deemed to be persuasive.

Any inquiry concerning this communication should be directed to John D. Ulm at telephone number (703) 308-4008.

  
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GROUP 1800